ECONOMICS & POLITICS 0954-1985
Volume 15 July 2003 No. 2

SOME LESSONS FROM TRANSACTION-COST POLITICS FOR LESS-DEVELOPED COUNTRIES*

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Transaction-cost politics views economic policy-making as a political process constrained by asymmetric information and limited commitment possibilities. This paper examines some implications of this perspective for less-developed countries (LDCs) considering policy reform. It emphasizes that success requires reform of the rules and institutions which govern the strategic interaction of the participants in the political game, and that reforms must cope with the special interests and asymmetric information which already exist. In this light, it examines some broad issues of the design of constitutions and institutions (definition and enforcement of property rights, control of inflation, and of government expenditures, federalism, and redistribution), as well as some specific issue of the design of organizations and incentives (problems posed by the interaction of multiple tasks and multiple interests, and their interaction with the limitations on auditing and administration that exists in many LDCs).

1. INTRODUCTION

LESS-DEVELOPED countries were an important focus of Mancur Olson's research.[1] His great humanitarian concern for the poor and his acute analytical mind were perfect complements in his efforts to diagnose their economic ills, and to trace them to the basic political problems of collective action and governance. For him, these problems were not historical accidents or manifestations of irrationality; they arose as an equilibrium of interactions of rational individuals. Thus his work was political economy in the best modern sense – a genuine combination of political and economic analyses and techniques. In this article I want to pay tribute to Mancur's immense contributions by reviewing some related recent literature in political economy, and drawing some lessons for less-developed countries (LDCs).

*This is a slightly revised version of a paper presented at the Latin American meetings of the Econometric Society in Cancun, Mexico, August 1999. I thank Andrei Shleifer and Mariano Tommasi for comments on the preliminary version, and the US National Science Foundation for financial support.
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[1]While his writings contain numerous discussions of LDCs, in both historical and current contexts, my personal favorites are chapter 6 of *The Rise and Decline of Nations*, and the article "Dictatorship, Democracy, and Development."

This exercise is timely for two reasons. First, many LDCs are actively implementing or considering major political and economic reforms; therefore lessons from academic research are more likely to fall on receptive ears and have some effect. Second, after an active decade of theoretical and empirical research in political economy, academic knowledge has reached a point where we do have some useful ideas to offer to policy practitioners. Articles with such aims have begun to appear. Laffont (1999) examines the implications of modern industrial organization theory for competition policy in LDCs. Hoff and Stiglitz (2001) discuss the prospects of alternative approaches to policy reform.

I will organize my ideas around the concept of transaction-cost politics; see North (1990) and Dixit (1996a).[2] The general theme is as follows. Economic policy as practiced in almost all countries is an equilibrium outcome of a political process, which is influenced by many costs of negotiating and implementing agreements, most notably costs of coping with information asymmetries and costs of making commitments credible. The process is also constrained by historically and socially predetermined institutions and organizations. Reforms must alter or adapt these institutions and organizations in the desired direction; to do this successfully, they must anticipate and make provision for the transaction costs that will inevitably arise in the operation of the new or modified procedures. Stated thus, the theme is very broad; of course I have to be far more selective, constrained by time, space, and most importantly, my own knowledge and ability. But I hope to provide a starting point for further thinking for policy reform in LDCs.

Before one can apply the lessons of transaction-cost politics to the special situations of LDCs, one must specify what is special about these countries. That is, of course, very difficult; LDCs differ among themselves in so many ways that they defy any academic attempt to put them into a common conceptual category. But for the present purpose one can identify a few features that are of sufficient significance in sufficiently many of these countries to be worth general study. First, many LDCs, especially in Africa and Asia, lack the human capital and communication infrastructure needed to provide efficient administrative and enforcement services, such as auditing, tax collection, and the regulation of trade and industry. In other countries, for example those that arose from the dissolution of the USSR, education is not the problem, but communication is a problem, and it is aggravated by the fact that their administrative departments possess considerable and arbitrary powers and can hoard information. Whatever the reason, successful policy design in most LDCs must cope with information asymmetries and the need for self-enforcing rather than

[2]Closely related themes can be found under other labels like "positive political theory" and "political economics."

externally enforced contracts. In the language of information economics, *agency problems* are especially severe; Laffont (1999) emphasizes this issue. Second, the territorial boundaries of many LDCs were arbitrarily determined by colonial powers; therefore the nation (the historical, ethnic, and sociocultural community) and the state (the political authority with powers of making and enforcing laws, extracting taxes, etc.) often do not coincide. Haynes (1996, pp. 27–29) emphasizes this, and offers it as the reason why the states in the Third World are often weak. Each state contains several groups with conflicting interests and sufficient power to influence the policy-making agencies; in the language of transaction-cost politics, the problem of *common agency* is particularly severe.

2. FEASIBLE REFORMS

Policy practitioners' interest in the findings of academic economic and political research stems from the desire to find and implement better policies; this interest is inherently normative. This seems inconsistent with the whole approach of political economy, which regards economic policy in a positive manner, as an equilibrium of the political process. Therefore I must begin with an examination of whether and how this conflict can be reconciled.

2.1 Rule-Making versus Policy-Making

Buchanan (see especially his statement in his Nobel Prize lecture, 1987) suggested such a reconciliation by distinguishing between two stages of the policy process: designing the constitution or setting up the basic institutions of policy-making on the one hand, and the operation of these institutions in individual instances of taking and implementing policy decisions on the other hand. Regarding the interaction of the participants in the political process as a game of strategy, we can regard the first stage as designing the rules of the game, and each instance of policy-making at the second stage as one play of the game. Buchanan argued that normative intervention is possible at the constitution-writing stage, but at the policy-making stage the outcome is determined by the previously designed rules, there are no degrees of freedom for intervention, and only positive analysis is possible. According to Buchanan, the stage of setting general rules for numerous future plays takes place behind a veil of ignorance, at a point in time when special interests have not yet formed; therefore it is possible to obtain unanimous consent for generally fair rules conducive to the welfare of the society as a whole. Hoff and Stiglitz (2001) use this idea by distinguishing between shallow interventions that are likely to fail because of the political actions of special interests (for example, urging a government to reform taxes) and deep interventions to fix the institutions (for example, the legislative rules that determine the tax policy in any one year).

In the following sections, I will discuss Buchanan's dichotomy, and the possibility of normative intervention, from different perspectives.

2.2 Commitment and Institution Design

The obvious practical inference from Buchanan's dichotomy is to use the unanimity at the constitution-writing stage and commit the institutions of economic governance in such a way that future policy acts will be optimal. The most prominent of such policy prescriptions is the delegation of monetary policy to an independent central bank. More ideas of this kind for macroeconomic policy stem from the "Italian school" of political economy; Persson and Tabellini (1999a) is an excellent survey of this literature, and their (1994) a collection of major articles on this subject.

However, others have argued that these institutional commitment devices are less than fully credible. Constitutions themselves can be amended, albeit at a high cost of political effort; legislation that implements the intent of the constitution in specific policy institutions is more easily changeable. For example, the US Federal Reserve is widely regarded as an independent central bank, but it is the creation of an Act of Congress, and can be forced to modify its behavior or even dissolved by a future Congress. The critics of the delegation approach have argued that its aims are more likely to succeed if the institutions are founded on the basis of an equilibrium of repeated interaction rather than a pure constitutional provision. In other words, institutional solutions will not work unless they are supported by reputational considerations; but if reputation-based credibility exists, then institutional design such as delegation is unnecessary. Lohmann (1998) makes this argument, and Posen (1998) develops the theme more fully.

2.3 Emergence of Special Interests

Buchanan's dichotomy serves a useful function by bringing to our attention the conceptual distinction between the design of rules and the play of the game. However, I argued in Dixit (1996a, pp. 19–31) that reality spans a continuous spectrum between the two categories. Special interests exist from the outset and continue to emerge at all times; few reforms occur at a pristine stage with undefined special interests. But the rules are never written in such complete detail as to foreclose all degrees of freedom of action at later stages.

This spectrum can be understood using some terminology from the theory of mechanism design. In this literature it is customary to distinguish between three stages of information asymmetry: ex ante, interim, and ex post. At the ex ante stage, there is a great deal of uncertainty but no information asymmetry. Each individual is uncertain about his own type (characteristics like endowments or preferences) as well as about the types of others. This is the veil of ignorance with special interests unformed. At the interim stage, information starts to get revealed but in an asymmetric way. Each individual finds out his own type, but not the types of others. At the ex post stage, if it ever comes, information is fully and publicly revealed. My claim is that most attempts at policy reform occur not at the ex ante stage but at an interim stage in the evolution of information in society. Moreover, reality is a continuous process of such interim stages; information emerges and special interests evolve all the time. The process can be thought of as one aspect of the emergence of social rigidities depicted by Olson in *The Rise and Decline of Nations*.

The mechanism of policy-making, that is, the design of the rules of the game, must be carried out bearing in mind this emergence of private information and special interests. In fact there are two distinct considerations.

First, the mechanism must respect the incentive compatibility constraints that arise from private information (adverse selection) and unobservable actions (moral hazard). Those possessing private information must be given enough of the economic surplus or rent to induce them to reveal this information truthfully, and those taking unobservable action must be given the correct incentives based on the correlated observable outcomes of their actions. This applies even if the mechanism is being designed at Buchanan's pure ex ante constitution-writing stage; the rules must be such that at future dates after special interests have emerged, the policy actions will abide by the incentive constraints that will then prevail.

The second aspect is specific to the situation where the rules themselves are being written (or reformed) at an interim stage. Here the mechanism should not worsen the expected utilities of those participants whose consent is essential to the reform; in other words, it must respect the participation constraints of the veto players. In some situations, for example in the US where it appears that anyone can delay any proposed reform endlessly by protest and litigation, it may be necessary to ensure that literally no one loses, that is, to secure a Pareto improvement.

As people learn more specific information about their own situation, these additional participation constraints will get harder to satisfy, and therefore a feasible reform will become harder to find. This can be said with greater precision using the theory of mechanism design. As one moves from the ex ante stage to the interim stage, the set of Pareto-efficient mechanisms becomes larger, that is, it becomes harder to find Pareto improvements; see Myerson (1991, pp. 487–488). Therefore reforms proposed at an interim stage are less likely to command unanimous approval, or even to achieve the consent of the key veto players in the game. This seems close to Williamson's *remediableness*: "an outcome for which no feasible superior alternative can be described and implemented with net gains is presumed to be efficient" (1996, p. 195; see also pp. 237–238).

If special interests have emerged but the nature of these interests is public information – for example, the size of losses inflicted by trade liberalization on workers and firms in import-competing industries is common knowledge – it may be possible to implement any reform that is beneficial in the aggregate by arranging transfer payments that give everyone a share of the aggregate benefit; the winners can compensate the losers and achieve a Pareto improvement. But this is difficult in practice. The instruments needed for such compensation may be unavailable or not incentive-compatible (Dixit and Norman, 1986); there may be asymmetric information about the effects of reform or about the preferences of the government (Coate and Morris, 1995); commitments to carry out future compensation may not be credible (Dixit and Londregan, 1995).

2.4 Endogenous Creation of Special Interests

The above analysis supposed that special interests emerge for some exogenous reason; for example, people who happen to own a type of land or a resource or a skill may gain if it becomes more valued in the world economy, or lose if its value declines. However, in reality there is another and even more common and important route by which special interests emerge, namely the actions taken by individuals in response to the original rules themselves. For example, suppose the rules include a provision of temporary protection to domestic industry to facilitate learning by doing. The rules create extra incentives to invest in such industries, and are indeed meant to do so. Once such investments have been made, the owners of these specific assets become a special-interest group that stands to benefit from a continuation of the protection.

Thus the creation of special interests can be endogenous, a moral hazard problem rather than an adverse selection problem. Where this risk is real, the constitution-writing stage should look ahead to it, and take into account the costs that these special interests can inflict on the economy in the future by stifling reform that may be needed later. This calculation may indicate that the rules should preclude a policy that may be justifiable before the special interests who stand to benefit from it have emerged. Unlike the case of adverse selection at the interim stage, such prudence in rule-making may be feasible in the moral hazard case precisely because the special interests in question have yet to emerge.

2.5 Reform After a Crisis

It is often claimed that socially beneficial reforms are more readily agreed to and enacted at times of crisis. The argument is twofold. First, a really serious crisis wipes out all special interests and takes us to Buchanan's ex ante stage. Second, because everyone is doing very badly in the post-crisis environment, all will be eager to settle for a better alternative in the bargaining over reform that will occur under these conditions. Unfortunately, both theory and observation suggest that the outlook is not so sanguine.

Even after major political upheavals, many interest groups remain from the previous regime. They can calculate how the new rules will operate in future plays, and may retain enough powers to veto rule reforms that would affect them adversely. And even if new rules are successfully put in place, they may not work as intended. Reality is so complex that these rules can never be sufficiently detailed to cover all contingencies of future operations; therefore, special interests with some residual rights of control can often thwart the operation of these rules by throwing spanners in the works, literally or figuratively. Reforms, to be successful, must recognize this problem and deal with it. For example, after the collapse of the Soviet regime, the Russian government found that it did not truly and fully own the supposedly state-owned industries; there were many "stakeholders" such as workers and managers, and the state could not successfully privatize these industries without giving enough of the asset values to these stakeholders in order to secure their consent and cooperation (Boycko et al., 1995, pp. 13, 33–38).

Nor is the process of negotiation over reform among conflicting interest groups necessarily made easier when they are all doing badly after a crisis. This is because bargaining is not a now-or-never choice of accepting an agreement or continuing forever in the bad state. Instead, it is a dynamic game where each player continually calculates the timing and magnitude of his concession. Each has to decide whether to concede enough to get an agreement immediately, or to wait a little longer in the hope that the other player will concede in that interval. The outcome depends on the players' patience, and their prior expectations about the other players' patience. The literature contains models with results that go either way; see Alesina and Drazen (1991) and Hsieh (2000). Therefore, we cannot have a clear presumption that a crisis will prove favorable to successful reform. Instead, we must be opportunistic and look for openings for normative reform whenever they might appear.

2.6 Classification of Policy Issues

The severity of the constraints on Pareto improvements at an interim stage, and the endogenous creation of special interests, differ in degree for different policy contexts. An analysis of these differences points out promising openings for beneficial policy intervention.

We can distinguish between situations where all interests remain reasonably well-aligned even after the veil of ignorance has been stripped, and those involving unavoidable conflict where the game to be played is close to zero-sum. A similar distinction is drawn in political science (Stokes, 1963) between *valence* issues where there is unanimity about the objective and the only question is how to achieve it most efficiently, and *positional* issues where ideological disagreement about objectives prevails. As is usual with dichotomies, in practice the distinction is one of degree, and issues range along a spectrum from valence-like to position-like.

In the context of economic policy, coordination problems come closest to the pure valence category. If all that is needed is a mechanism for choosing between multiple Pareto-ranked equilibria, an institution that helps us choose the best one should command unanimous consent. Traffic laws, and daylight-saving time, are often offered as an example of this. Even in these instances there are some minor conflicts: some drivers are made worse off when some streets are made one way, and some farmers dislike switches to and from daylight-saving time.

Next in the degree of difficulty come prisoners' dilemmas. For example, we can think of the general legal system of defining and enforcing property rights as a resolution of the prisoners' dilemma where every individual would try to achieve some private gain by encroaching on others' rights. Even here, if there are some short-run actors, a good resolution of the dilemma using a repeated-game framework may not be possible. Also, if selective enforcement of the rights only of the politically powerful groups is possible, that is what may happen.

Third, some problems whose resolution needs a credible commitment can be amenable to unanimity. For example, if everyone stands to gain from lower inflation, then commitment to an independent central bank may be possible in a sufficiently durable society. Here the question is whether a later generation, facing the short-run temptation to inflate, can reverse the independence.

As against this, many reforms of regulation, taxation, liberalization, and privatization fall close to the zero-sum or positional end of the spectrum. These reforms unavoidably create winners and losers; therefore, an interim stage where the potential winners and losers are already identified is not likely to result in an easy agreement on a "better" rule or institution. Trade liberalization is an important case in point.

In many instances, especially ones involving reforms of regulatory, tax, or trade policy regimes, the lawyers who advise individuals and firms and handle litigation have a large amount of specific human capital invested in the existing arrangements. Therefore, they form an independent special interest wanting to preserve the status quo. Lawyers constitute a very large proportion of legislators and high-ranking members of the executive branch in many countries; they therefore wield enormous power in politics and can be a potent veto player opposing reform.

In the most difficult of these circumstances, an external agency may help a country achieve commitment and thereby enact credible reform. The IMF and the World Bank have played this role, although their motives and achievements are topics of controversy.

2.7 *A Summing-Up*

Let me briefly restate the themes developed above. Economic policy is the outcome of a political process. This process consists of the interaction of individuals, mediated by constitutional rules, and frameworks of institutions and organizations. Therefore, policy reform must include reform of these rules and frameworks. However, the same interests that would preclude the successful implementation of better policies within the existing rules and frameworks will also resist the deeper reforms of the rules and frameworks. The normatively inclined reformer must seize opportunities as they become available, use the interests that align with his concerns, and bear in mind the information advantages and powers of the players in the subsequent political games, in his quest to achieve successful reforms.

In the language of mechanism design, reforms are being contemplated at some interim stage in the evolution of information and interests. A successful reform has several requirements. First, one should identify the interests that have already formed, their objectives, and their private information. Second, one should formulate the incentive constraints for all, and the participation constraints of the veto players, in the game. Then a mechanism can be designed to be incentive-compatible and interim-efficient. Third, reforms that take the form of institution design are more likely to succeed if they are based on equilibria of repeated social interactions that give credibility to the structure. Finally, one should recognize that reforms put in place now may create special interests later; when one takes into account the cost this entails in the future, the best policy now may be one of inaction. This last lesson may be the hardest for economists to learn and remember, since they are often trained and inclined to believe that they can be proactive and improve matters.

In what follows, I look at a few examples using this perspective, and some related ideas. I divide the discussion into two groups of examples. The first concerns larger issues involving major institutions or constitutions, and the second group includes narrower matters of incentives in organizations. This is again a useful conceptual distinction, but there are many ambiguities and overlaps in practice. I conclude with some other general thoughts concerning reform.

3. DESIGN OF CONSTITUTION AND INSTITUTIONS

3.1 *Quality and Size of Government*

Any prescription for good reform must depend on some explicit or implicit idea of what constitutes good government. Indeed, the issue is often put as "markets versus government," or more generally, the optimal size of government. This is simplistic; the quality of government is more important than its size. While there is plenty of research and controversy on these questions, I want to point out some recent interesting work by La Porta et al. (1999a). They consider several measures of government quality, including protection of property rights, economic and political freedoms, provision of public goods, bureaucratic delays, and corruption. They regress each using cross-country data on several historical, geographic, social, and cultural characteristics of the countries. They find that "countries that are poor, close to the equator, ethnolinguistically heterogeneous, use French or socialist laws, or have high proportions of Catholics or Muslims exhibit inferior government performance." However, controlling for these other things, "larger governments tend to be better performing ones."

Unfortunately for the reformer, even if one accepts these controversial findings, most of these characteristics are outside anyone's control, and poverty and poor government can form a vicious circle. It is good to know that larger government need not by itself be bad; in this respect these findings support the recent theme of Rodrik (1997, 1998). However, largeness has not been shown by itself to cause good performance either. Indeed, the causation may run the other way; the public may tolerate the growth of a government that is performing well. Therefore, the correlation does not provide a justification for increasing the size of government while leaving the other aspects unchanged.

3.2 Property Rights

The importance of protecting ordinary citizens' property rights is evident from Olson's writings on governance. Later work by De Soto (2000) supports this, as does that of La Porta et al. (1997, 1998, 1999b) comparing the rights of minority shareholders and creditors. They find that these rights are poorly protected in countries using the Latin legal system. As a result, ownership of firms in these countries is much more concentrated and capital markets are less developed than in common law countries that offer better protection of these rights. Without revamping the whole legal system, it should be possible to strengthen the enforcement of property rights of small shareholders and creditors. Of course, if the present system is the result of the political power of small groups of the wealthy, then such reform may be difficult to enact.

This pertains to the traditional role of the government in enforcing property rights and contracts against encroachment or violation by other private individuals. In some countries and at some times an even more important task for a constitution or institutions is to guard private property against predation by the state itself. If the rule of law is not well established at this basic level, investors will be deterred by the fear of arbitrary changes of rules and expropriation. North and Weingast (1989) argue that Britain's "glorious revolution" in the late seventeenth century restrained the king's and his government's predatory powers; this increased the security of property rights and led to the rapid development of capital markets and economic growth. By contrast, Spain retained and practiced the powers of arbitrary expropriation, and therefore stagnated. Levy and Spiller (1994) find that an independent and well-regarded judiciary branch is vital for successfully restraining arbitrary exercise of powers by regulatory agencies. Of course the executive branch is often tempted to bend the judiciary to its will; preserving and protecting the independence of the judiciary is a slow and difficult task of reputation-building.

3.3 *Control of Inflation*

This is the best-developed and best-known topic in the literature on the macro-political economy, and it is of special importance to LDCs, given the struggle with inflation waged by most of these countries throughout much of the 1970s and 1980s. Even though the struggle appears to have been won, the lessons of the research and of the fight should not be forgotten, because the basic temptations for governments to inflate remain and may resurface. In the previous section I mentioned the general issue of commitment, and delegation versus reputation as methods for achieving commitment. Here I take up one specific feature of the optimal policy, namely the desirability of flexibility.

The reputational solution recognizes that the government (or its central bank) and the private sector are engaged in an ongoing game where the former chooses monetary policy and the private sector forms expectations and conducts economic activity. The government's reneging on its commitment to maintain low inflation can be prevented if its cost of reneging is high enough. Lohmann (1992) stipulates an exogenous cost; Dixit (2000) endogenizes it in the context of the repeated game itself.

This line of research leads to a new result – it shows that commitment to a totally inflexible rule of maintaining a constant low level of inflation at all times may not be credible. Generally, the optimal feasible rule is flexible. It allows higher inflation if the economy is hit by sufficiently bad supply or demand shocks. Since the private sector's expectations in each period are formed before the shock hits, this inflation is a surprise and generates more output when it is especially valuable. But optimal flexibility does not mean ex post freedom to act as in an "escape clause"; instead the rule (function) relating the inflation to the size of the shock is announced in advance and the government's adherence to the rule is observable ex post. This whole function – the whole rule – comprises the commitment and is folded into the formation of expectations; the higher inflation that results at times but in

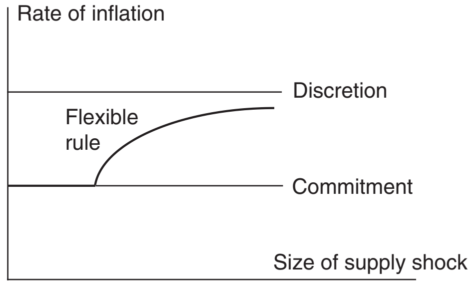

Figure 1. Credible flexible inflation rule.

adherence to the rule does not constitute reneging and therefore does not cause a collapse of the government's reputation.

Figure 1 illustrates such a function for the Barro–Gordon model of inflation. The lower of the two horizontal lines, labeled "Commitment," is the level of inflation that would be optimal if irreversible delegation to an institution were feasible. The higher horizontal line, labeled "Discretion," is the level of inflation that would result in total absence of commitment, when the political game is played separately in each period. The thick curve labeled "Flexible rule" is the optimal credible rule based on reputation. The horizontal axis shows the adverse supply shock that creates the temptation to inflate for the government of the day. If this is sufficiently low, then full commitment is feasible – the temporary advantage to be gained from the higher inflation is not worth the cost of the loss of reputation. If the shock is more severe, then it is optimal to accommodate this desire to inflate, but only just enough to balance it against the future cost of the loss of reputation. Only for very severe shocks does the permitted inflation approach the totally discretionary level. And this flexible rule should be preannounced; an escape clause that simply allows a government to abandon the commitment if the shock exceeds a certain level would lead to total discretion in those circumstances.

The general principle is the superiority of flexible rules over inflexible rules on the one hand, and ruleless discretion on the other. It is important to have flexibility to respond to special circumstances, but the way in which the flexibility will be used, that is, the state-contingent policy rule, has to be announced in advance and adhered to ex post. Of course, this can be done only if the state is publicly and objectively verifiable. This general principle is applicable not only to monetary policy, but also to several other kinds of policies.

3.4 Control of Government Expenditure

Many LDCs, and many industrialized countries too, have found it difficult to control the level and growth of government expenditure. From a normative point of view, the main justification for government expenditure is the provision of public goods, including defense, order, and the legal system to protect property rights and enforce contracts. In reality, the expenditure is the outcome of a political process. In a democracy, the forces that act on this process include ideology, the parties' attempts to woo pivotal voters or groups, and pressures from organized lobbies. The resulting expenditure level can be normatively excessive because it provides private benefits to special interests while inflicting greater cost on the rest of society, or because legitimate public goods are provided inefficiently. The latter can be the result of various agency problems that are discussed in the next section, or a way of providing private benefits to a powerful special interest, namely government employees.

Political forces interact through the institutions of legislation and administration. Therefore we may be able to design the institutions so as to alter the outcome of the interaction in a desirable direction. I want to mention two applications of this idea to the issue of government expenditure.

Cogan (1994) examines the history of the US Congress, and finds that whenever the authority to introduce spending resolutions to the floor of the Congress was vested in one committee, expenditures were under much stricter control. The Ways and Means Committee had this authority from 1789 to 1865; the Appropriations Committee had it from 1865 to 1877 and from 1919 onwards, but it was eroded, gradually after the 1930s and rapidly after the 1970s. In the periods when many committees could introduce spending resolution, expenditure grew rapidly. This can be seen as a prisoners' dilemma or a common resource pool problem. Each committee individually stands to benefit politically by "bringing home the bacon" to its lobbyists or constituents, whereas the blame for the resulting increase in taxes or the deficit is shared out among all. A single committee responsible for appropriations can be held directly accountable by the public for the adverse consequences of the higher expenditures; therefore, it more fully internalizes the costs of the decision. This episode also illustrates the critique of the delegation approach to institution design. Institutional commitments can be overturned if there is enough political pressure to do so.

Persson and Tabellini (1999b) construct a model to examine differences between presidential and parliamentary systems, and between majoritarian and proportional representation systems. In a theoretical model, they find that majoritarian and presidential regimes increase competition among parties and politicians. As a result, these regimes provide fewer public goods and fewer rents to politicians than the opposite kinds of regimes. However, majoritarian regimes provide more redistribution and have larger governments than proportional ones, while presidential regimes have less redistribution and have smaller governments than parliamentary ones. Using cross-country data, they find that the result about the smaller size of government in presidential regimes is strongly supported by the data, and the other findings are also supported, albeit less strongly. A rough intuition is that the president has more direct and immediate accountability than do members of a parliament. Persson et al. (2000) develop this model further and find empirical support for these theoretical propositions.

If one wants to undertake reforms guided by these findings, the opportunities are variable. The committee structure of a legislature is easier to change, but for that very reason the reform lacks full credibility. As for the choice of a presidential or a parliamentary system, this is often historically determined. Even when there is a choice, many other issues enter into it, and control of expenditure need not be the primary consideration.

3.5 Redistribution

According to the usual normative view of economic policy, redistribution of income or wealth should be governed by a social welfare function which incorporates egalitarianism in some form. This social welfare function should be maximized subject to constraints that include individuals' asymmetric information and effort choices, and these imply marginal tax rates considerably below 100 percent. But an overview of the research suggests that the optimal schedule should exhibit considerable progressivity; see Myles (1995, pp. 156–158).

In reality, the structure and rates of taxation are determined in a political process, in which egalitarian ideology is only one of several influences. Private interests are also important – organized groups lobby for taxes and transfers to benefit their members, and political parties and candidates in elections make promises of taxes and transfers to attract the votes of pivotal groups. This is particularly important in the context of many LDCs, which lack an effective general income tax and must carry out redistribution using a variety of commodity taxes and transfer schemes. The diverse special-interest groups that exist in these countries then get an excellent opportunity to play the game. Some of these groups are defined by ethnic or geographic differences that persist from the way these countries were defined by colonial powers. Others relate to economic occupations; these proliferate and generate conflicts when the structure of the economy is changing drastically in the course of development. Therefore an understanding of the effect of these groups on tax and transfer policies is especially important for LDCs.

Research on the political economy of tax and transfer policies has proliferated in the last two decades; Boadway and Keen (2000) have surveyed it very thoroughly. The literature is broadly divided into lobbying models and voting models.

In the lobbying framework, Grossman and Helpman (1994) and Dixit (1996b) consider the case where group interests arise from ownership of specific assets engaged in the production of particular goods. Then a group fares better in the political process if it forms a small proportion of the population, and the good is supplied in a large quantity but inelastically. None of these matters have anything intrinsic to do with the relative income or wealth levels of the groups. In the electoral literature, Lindbeck and Weibull (1987) and Dixit and Londregan (1996) consider transfer policies targeted to particular groups. They find that the groups getting the best treatment have the following characteristics:

1. The distribution of political ideology of their members peaks near the center of the spectrum between the rival parties' positions.
2. Their members do not hold these ideologies very firmly; they readily switch their votes in response to inducements of private transfers.
3. Their members have low incomes.

This last seems comforting, but the reason behind it is not at all ethical. The poor have a relatively higher marginal utility of income. Therefore, they switch their votes more readily in return for promises of transfers, making their votes cheaper for the politicians to buy.

The political process is not devoid of ideology; Dixit and Londregan (1998) consider a model where the parties and the voters are averse to income inequality for ethical egalitarian reasons. They find that the equilibrium policy can be split into two components – a general income tax whose marginal rate is determined by the tradeoff between ideology and vote-getting concerns, and transfers targeted to particular groups for pork-barrel reasons as in the work cited in the previous paragraph.

This suggests a better way to implement ethical concerns in tax policy. The egalitarian policies can be fixed by the constitution in the form of a negative income tax, leaving the pork-barrel policies for the process of election-to-election politics. Of course I am assuming that it is not possible to write a constitution that forbids the use of pork-barrel transfers, or that it is not desirable to do so because the political process would only find complicated ways around the ban and in the process create even greater deadweight losses.

3.6 Compromise

When a country's polity is divided along ethnic or geographic lines, we often see the government of the day pursuing economic policies that favor its own ethnic group or region. Government jobs and contracts are awarded to members of its group; projects are located in its region. If political power shifts to a different group or region, then economic benefits shift accordingly.

All groups would benefit from a system that shared the economic benefits more equitably at all times, given the usual assumption of concave utilities. Some countries' constitutions contain effective safeguards against economic discrimination, or effective limitations on the government's power to discriminate. But in many cases such safeguards are either absent or ineffective; then we must look for a political solution.

Unless the ethnic or regional strife is so bad that the dissolution of the country is a real possibility, the groups are in an ongoing relationship. One would think it possible for them to evolve an arrangement for sharing economic benefits. But at each interim stage where one group is in power, it has the temptation to get an immediate gain by reneging on the agreement. Since political contracts of this kind are not going to be enforced by the courts, they must be self-enforcing, or subgame-perfect. Such models have been analyzed by Alesina (1988) and Dixit et al. (2000); here I present an extremely simple special case that brings out some parameters relevant to successful compromise.

Suppose there are two groups, A and B, which coexist over an infinite succession of discrete periods. In each period one of the two is in power. If A is in power in one period, then with probability P it stays in power the next period, and with probability $(1-P)$ power shifts to B. If B is in power in any period, then with probability Q it says in power the next period, and with probability $(1-Q)$ the power shifts to A. In each period, the group currently in power chooses the allocation of one unit of economic benefits. The utilities of the two groups from having X units of economic benefits are given by $U_A(X)$ and $U_B(X)$ respectively, and are increasing and concave.

First suppose the country is in a no-compromise mode; the group in power in any period grabs the whole unit of available economic benefits. Let $\bar{V}_A$ denote the expected present discounted value (EPDV) of utilities to A when it is currently in power, and $\underline{V}_A$the EPDV when it is currently out of power. We have the recurrence relationships

$$\bar{V}_A = U_A(1) + \delta_A[P\bar{V}_A + (1-P)\underline{V}_A]$$
$$\underline{V}_A = U_A(0) + \delta_A[Q\underline{V}_A + (1-Q)\bar{V}_A],$$

where δ_A is the discount factor used by group A. Solving these, we find

$$\bar{V}_A A = \frac{(1-\delta_A Q)U_A(1) + \delta_A(1-P)U_A(0)}{(1-\delta_A)[1-\delta_A(P+Q-1)]}.$$

A similar calculation gives us $\bar{V}_B$, the expected present discounted value of utilities to B when it is currently in power.

Now consider when an arrangement in which the economic benefits are shared equally, irrespective of who is in power. Here the present value of utilities to A is simply

$$V_A^* = U_A\left(\tfrac{1}{2}\right)/(1-\delta_A).$$

Again a similar equation gives the value for B. The question is whether this arrangement is sustainable. Suppose that if the group currently in power reneges, the whole agreement will collapse forever. Thus the alternative to full compromise is a "grim trigger strategy." Then the group currently in power may as well grab all currently available benefits. Let us consider when such reneging is *not* in the private interest of the groups.

If A is to continue to honor the equal shares agreement when in power, we must have $V_A^* \geqslant \bar{V}_A$, which can be written as

$$\frac{\delta_A(1-P)}{1-\delta_A Q} \geqslant \frac{U_A(1)-U_A(\frac{1}{2})}{U_A(\frac{1}{2})-U_A(0)}. \tag{1}$$

Similarly, the incentive constraint for B is

$$\frac{\delta_B(1-Q)}{1-\delta_B P} \geqslant \frac{U_B(1)-U_B(\frac{1}{2})}{U_B(\frac{1}{2})-U_B(0)}. \tag{2}$$

These inequalities tell us whether larger or smaller values of various parameters are more conducive to compromise. Some results are well known from the general theory of tacit collusion in repeated games – greater patience (higher δ_A and δ_B) helps; so does preference for moderation rather than extreme swings of income, or greater risk aversion that is captured by more concave functions U_A, U_B, because that makes the right-hand sides of (1) and (2) smaller. The new finding specific to the political context comes from inspecting these inequalities for the roles of P and Q.

Group A's incentive constraint (1) is more likely to be violated when the left-hand side is smaller, which happens when P is larger or Q is smaller. This is intuitive: if group A is more likely to hang on to power, or group B is more likely to lose power after occasionally gaining it, then A has less interest in sustaining compromise. Similarly, B's incentive constraint (2) is more likely to be violated if Q is larger or P is smaller. But since compromise requires the fulfillment of both constraints, there is an unavoidable conflict between these desiderata.

Figure 2 illustrates this for a numerical example. Here each utility function is the square root; then the right-hand side of each constraint equals 0.4 approximately. Each group's discount factor is 0.8 (annual 5 percent discounting with four years between successive elections). Then in the figure, group A's incentive constraint holds to the left of the steeper line, and group B's incentive constraint holds below the flatter line. This divides the figure into four regions. In the wedge-shaped area to the south-west, labeled C, both incentive constraints hold and compromise is possible. Note that in this area the probabilities of persistence of power P and Q are not too different and not too large. In the region labeled A, P is relatively large and Q small; thus group A has a lopsided hold on power in the sense that it is quite likely to continue in power once attained, while the other group is quite likely to lose power within one election period. Here group A's incentive constraint does not hold; any time it attains power it will grab the whole surplus. Similarly, in region B group B has a lopsided hold on power.

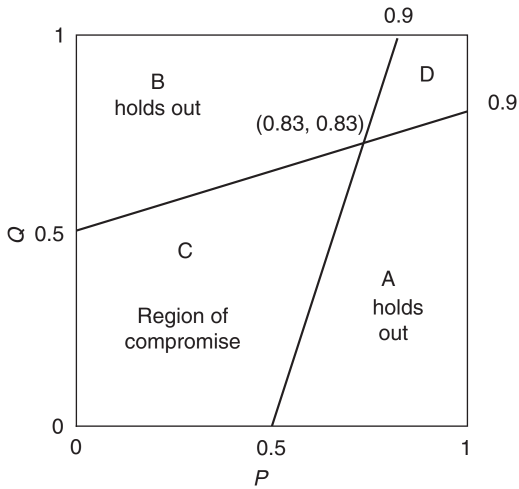

Figure 2. Possibility of self-enforcing compromise.

In region D to the north-east, power is not unequal but is highly durable; either group once in power is very likely to remain in power. Then neither incentive constraint holds, whoever gets into power grabs all the surplus, and the compromise does not get implemented.

This suggests that compromise cannot be sustained in a divided polity unless there is a sufficiently high likelihood of switches of power. Asymmetry in favor of one group, where it is likely to retain power once attained, while the other group is likely to lose power quickly, is particularly undesirable. Symmetric but highly durable power is also bad. Some persistence in power can be tolerated; in the numerical example, full compromise can be sustained even when each group has a 5-in-6 chance of retaining power from one election to the next.

Of course this model is very simplistic – it tests the feasibility only of full compromise, using only threats of reversion to no compromise, and under an exogenous two-state model of transition of power. The papers on which it is based (Alesina, 1988; Dixit et al., 2000) are considerably more general in different respects. Most importantly, compromise that falls short of full equality is considered, which extends the region in the parameter space where some compromise is possible. But the basic insights stated here are qualitatively robust.

These results seem bad news for many countries in their recent transition to democracy, where the ethnic or linguistic or regional composition of groups is very lopsided. If the constitution is established using enough goodwill or farsightedness, it may be possible to institute safeguards, or require power sharing; these results demonstrate the dramatic need for such measures. Indeed, some hitherto successful instances of reform did include some – South Africa seems an example of goodwill, and Chile of farsightedness. In cases of geographic divisions, an alternative may be federalism, where regional governments have the powers to allocate economic benefits. But once again, these institutions are determined at an interim stage, and the powerful organized groups that have emerged at that point may bend them to serve their own interests even at considerable cost to aggregate efficiency; Tommasi et al. (2001) demonstrate this in the case of Argentina's fiscal revenue-sharing system. It should also be said that federalism may bring other problems of its own.

4. DESIGN OF ORGANIZATIONS AND INCENTIVES

Principal–agent relationships exist everywhere in the political and administrative processes of making and implementing economic policies. These relationships are quite complex. Each agency often performs multiple tasks. The relationships are hierarchical with many vertical layers and may even come full circle. Thus the politicians are agents of the citizens (at least in theory), the civil servants are agents of the government (again at least in theory), the civil service has its own hierarchy, and administrative agencies regulate industry and enforce tax policies, where they are like principals, and firms and citizens are like agents.

There are also multiple horizontal links; each principal has several agents, and most importantly in many political contexts, each agent is simultaneously answerable to several principals whose interests are not perfectly aligned and who act non-cooperatively in trying to influence the agent's actions. Indeed, many observers have argued that such multi-principal or common agency is the crucial distinguishing feature of government bureaucracies as opposed to private firms; see Wilson (1989, pp. 236–237, 300), Dixit (1996a, pp. 95, 98–104), Martimort (1996).

In each such relationship, we have the usual problems of unobservable action (moral hazard) and asymmetric information (adverse selection). They are made more complex by the multi-task and multi-principal features, and by the possibility of collusion among a subset of agents in a vertical hierarchy or a horizontal collection of agents.

This is true of politics and administration in all countries, but within this framework the LDCs have some special features and problems. Many LDCs inherited the already complex administrative structures of their colonial powers, and added their own "improvements" to make them even more byzantine. But their human capital and information and communication networks in the economy have not increased to cope with this additional complexity. The existence of ethnic and regional conflicts in many LDCs worsens the common agency problem. In all, LDCs face especially severe agency problems.

Here I shall first outline some simple theory of moral hazard in multi-task and multi-principal agencies, and then consider whether it is possible to cope with these problems to some extent by designing the organizations and incentive structures appropriately.

4.1 Some Theory of Incentives

Holmström and Milgrom (1991) analyzed multi-task agencies with moral hazard, and found that interaction among tasks forces the principal to set less powerful incentives if the different tasks are substitutes in the agent's cost of effort, and more powerful if they are complements. Consider the case of substitutes. If the principal increases the power of the output-based incentive for activity 1, the agent exerts more effort on this activity, which increases his marginal cost of effort on activity 2 (because the two are substitutes). This causes the agent to devote less effort to activity 2. In his optimal scheme the principal takes this secondary effect into account, and is therefore more restrained in giving a powerful marginal incentive payment for performing activity 1. A symmetric argument applies to the power of the output-based incentive for activity 2. When the activities are complements in the agent's cost, that is, when an increase in the level of one reduces the marginal cost of the other, these arguments run the other way and incentives become more powerful.

Holmström and Milgrom (1988) consider a common agency with two principals and activities; Dixit (1996a, 1997) examines the general case with any number of principals and activities. When each principal observes the outcome of all tasks, and can offer marginal rewards or penalties based on all observations, incentives are weaker; in the specific linear–quadratic model used, the effect is as if the risk aversion of the agent is multiplied by the number of principals. The rough intuition is that each principal offers a customary positive marginal payment for the output that is of relatively greater concern to him, and a negative marginal payment, which acts like an insurance for the output risk (and therefore the agent's income risk) associated with the task that is of relatively greater concern to the other principal. The netting out of the two principals' positive and negative components leaves the agent with weaker overall incentives on all tasks.

The effects of multiple tasks and multiple principals interact. The weakening of incentives in the substitutes case, and the strengthening in the complements case, are both magnified in proportion to the number of principals.

I can show this in a very simple special case of the above models. Suppose there are two principals and two tasks. Principal 1 places a value β on each unit of task 1 and 0 on task 2; principal 2's valuation is 0 for task 1 and β per unit output of task 2. The output of each task equals the agent's (unobservable) effort devoted to it, plus a normal error whose variance equals ω; the two errors are independent. The cost to the agent of exerting efforts x_1 and x_2 for the two tasks is given by:

$$C(x_1, x_2) = c(x_1)^2 + c(x_2)^2 + 2kx_1x_2.$$

If $k > 0$, greater effort on one task increases the marginal cost of effort on the other. Therefore, a greater marginal reward to one will draw effort away from the other, and the two tasks are substitutes in the agent's actions. Likewise, the two are complements case if $k < 0$. (Of course $|k| < c$ for the cost function to be convex.) The agent's coefficient of absolute risk aversion is constant and equal to r.

With all this symmetry, the marginal payments per unit of output will be equal for the two tasks, and the common level α can be found using equations (4) and (5) in Dixit (1997). If the principals act cooperatively and therefore in effect like one principal, we have:

$$\alpha^{\text{coop}} = \frac{\beta}{1 + r\omega(c + k)}, \tag{3}$$

whereas if the principals act non-cooperatively,

$$\alpha^{\text{non-coop}} = \frac{\beta}{1 + 2r\omega(c + k)}. \tag{4}$$

If there are n principals, the 2 in the denominator is replaced by n. Thus, given the other parameters, an increase in n increases the denominator in (4) and thus weakens incentives if $k > 0$, that is, the tasks are substitutes in the agent's calculation. In international agencies where every sovereign country is in principle a separate principal, the weakening can be dramatic indeed.

I pointed out earlier that the quality of administration in LDCs is often poor. In the agency context, this implies larger errors of observation; that is, a higher ω in the above notation. As we see from the formulas for the marginal incentives, (3) for the single-principal case and (4) for the common agency case, this means even weaker incentives, especially in the latter case.

4.2 *Implications for Agency Design*

Thus we have three forces weakening incentives – large errors of observation, multiple non-cooperating principals, and multiple substitute tasks. It would seem obvious that more powerful incentives are desirable, but the matter needs more careful thought. Each principal's choice is optimal given the constraints he faces. Therefore, in a single-principal case, the outcome is Pareto-optimal given the limits of observation and organization. Improvements must come, not from any forced sharpening of incentives within the existing agency structure and observation technology, but from a reform of the framework to relax the constraints.

The Nash equilibrium with multiple principals is not Pareto-optimal, but to improve upon the equilibrium it is necessary to change the rules of the game played by the principals and thereby get a new equilibrium; attempting to force higher-powered incentives against the principals' equilibrium is unlikely to work. We can think of all these changes as being contemplated ex ante by the principals in this game, or by a higher-level principal in a vertical or hierarchical agency structure.

Reducing the error of observation is a long-term task, requiring improvements in the auditing and enforcement capabilities of the administration. These must come from better education, improved information and communication, etc., but there may be some scope to improve the incentive structures in public service careers. In the short run, importing administrative expertise from other countries may help, but the imported administrators may not perform so efficiently because of their lack of local knowledge, and the scheme may meet political resistance.

Getting the principals to act cooperatively is hard in the realm of politics. There are good reasons for their failure to cooperate – they have to arrange to share the resulting aggregate gains, and find it difficult to make credible commitments needed for this, especially when they have widely divergent interests and regard one another with enmity and distrust.

Reallocation of multiple tasks across agencies, that is, organizational reform, seems a more promising approach. The conduct of microeconomic policy (trade, regulation, taxation, provision of public goods, etc.) involves so many separate tasks that it is impossible to have a separate agency for each individual one. Sometimes the grouping into tasks is almost totally fixed for reasons of economies of scope in acquiring expertise about tasks, in channels of auditing and communication, etc. But to the extent possible, incentives can be sharpened by grouping together tasks that are complementary rather than substitute in the agent's cost. We saw above that the effect of complementarity (more negative k) on the power of incentives is larger when the error variance ω is larger, and in non-cooperative common agency where r gets multiplied by the number of principals. These are just the forces that otherwise weaken incentives. Thus, fortunately, the effect of task complementarity is strongest precisely when it is most needed.

As an example, consider the problem of regional development, especially the construction of infrastructure. This could be accomplished using one of two organizational structures. There could be departments based on functions: one for roads, one for dams, one for telecommunications, and so on, in each case for the whole country. Alternatively, there could be regional authorities, each responsible for all the projects in its region. One would expect that the regional authorities would have a less serious common agency problem – the interests of the beneficiaries of different kinds of development within a region are more likely to be more closely aligned than those of the beneficiaries of one kind of development across regions.

Also, the different tasks of a regional agency are likely to be somewhat complementary, because planning for roads, dams, railways, phone lines, etc., can be done better in an integrated way. In a function-based structure, increased effort on planning roads in one region is likely to raise the cost of effort on planning in another region, which is the case of substitutes. Thus, the regional structure seems to have the advantages of mitigating common agency problems and exploiting task complementarity to strengthen incentives.

Of course, I am just making guesses about the cost functions in the different conceivable types of agencies; I do not know of any good data or empirical studies of this issue. But if my guesses are reasonable, then the conclusion suggests that regional organization of agencies to supply public goods has an advantage because they can be given sharper incentives. One can interpret this as an argument in favor of federalism, or in the EU jargon, subsidiarity, namely the devolving of decisions to the smallest feasible units.

The results of Shleifer and Vishny (1993) about corruption can be seen in this light. They argue that in a system where several officials independently allocate complementary government favors, for example when a construction project needs permits from each of several agencies, or an importer needs licenses or permissions from several ministries and customs officials, there is more total corruption than when all these favors are allocated by a single monopolist official. If we regard the officials as multiple principals and the permit-seeker as the "agent," then the agent's "tasks" of giving bribes are complementary across principals, and the "incentives" are stronger resulting in more corruption. The pernicious effects of this practice in LDCs are well known, especially from De Soto (1989) and his followers.

Conversely, Shleifer and Vishny point out that if several officials provide substitute services, for example if a passport can be obtained from any of several windows or cities, then corruption is low.

In this instance, the complementarity is bad, leading to strong incentives to bribe, and a beneficial organizational reform would introduce substitutes, that is to say, competition among government agencies. Each agency would have the power to grant all the permits that are needed for a project, but there would be two or more such agencies competing with each other. This may aggravate the moral hazard problem (which exists anyway, even for a corrupt monopolist agency) where the agency grants permits to unqualified applicants who are willing to pay a sufficiently high bribe, but even that can be mitigated by the natural incentive for the agencies to monitor each other and inform the higher-level principal about any malpractices.

4.3 Remarks on Agencies with Adverse Selection

I have focused on just a couple of issues that arise in agencies with moral hazard, and have ignored a host of other problems. To conclude this section I merely mention a few others. A particularly important one is collusion at lower levels of a vertical agency hierarchy, for example the capture of a regulatory agency by the industries it was set up to regulate; a thorough treatment of this is given by Laffont and Tirole (1993, chapters 11, 12).

When the agent has private information, the principal must share some of the benefit (rent) from the relationship in an appropriately structured way so as to induce the agent to reveal his information truthfully; Laffont and Tirole (1993) is again a definitive treatment of regulation in such situations. We saw that in LDCs such information asymmetries are likely to be especially serious; therefore more rent-sharing is needed. However, this may conflict with other constraints that are also relevant in LDCs, especially budgetary limitations. This necessitates a compromise or a third-best outcome. Multi-task and multi-principal problems may further aggravate the situation, because one principal's rent-sharing scheme affects the agent's response to the other's scheme, thereby generating externalities among the principals. Whether these externalities are positive or negative depends on the substitution or complementarity of the tasks in the agent's payoff function. Thus the results have some features similar to those of the moral hazard case discussed above. As there, it may be possible to do better by suitably redesigning the agencies by reallocating the tasks among them. Theoretical research in this area remains to be done.

5. CONCLUDING REMARKS

I want to conclude with a couple of general thoughts suggested by the above examples.

5.1 General Equilibrium of Reform

Economists are used to thinking of the economy as a system. Everything affects everything else through links of substitution and income effects; general equilibrium is the background idea of our subject. Politics in a general sense, and its manifestation in the design and operation of economic policy, are no different. Reformers must take into account such general equilibrium effects. We saw minor examples of this in the context of multi-task and multi-principal agencies, where the links across tasks and agencies are important to bear in mind. A more important and topical example concerns privatization.

Privatization is often undertaken by a reforming government or required of an unwilling government by an international organization. At this point the immediate concern is to avoid inefficiency and corruption in the process of privatization – to ensure that the assets are not given away to cronies who will not use them efficiently in productive activities. An obvious solution is to conduct a clean auction under supervision of the international organization. But who will be the high bidder at such an auction? The person or company who foresees the most profit from using that asset in future. What if the regulatory or tax agencies of the government remain inefficient or corrupt? Then the most profit could accrue to a crony or a well-connected company just the same, and such an inefficient user could emerge as the winner of a perfectly clean auction. To avoid this, the reformer must consider reform of the regulatory institutions simultaneously with the act of privatization.

5.2 Roles of Theories and of Economists

Finally, if economic policy is the outcome of a political process, what is the role of economists in this process? Of course, economists are learning to use their tools – choice, strategy, information, equilibrium, and so on – to improve our understanding of this process, but that falls far short of the traditional ambition of economists to give policy advice that will make a difference. This is a vexing and unsettling question; see O'Flaherty and Bhagwati (1997) and the discussion that follows that paper. Let me suggest one possibility based on several remarks made in that debate.

Special interests in the political process are often too few or too weak to get their way by the sheer force of numbers and even of money and organization. They are more likely to succeed if they can get the backing of a respectable-sounding idea or theory. For example, an industry wanting protection with the purely selfish aim of preserving the incomes of the owners of its specialized assets (capital, labor, and land alike) does better if it can make its case on the argument of "fair trade"; domestic entrepreneurs who could not successfully launch their ventures profitably without protection or subsidies can persuade the public to pay the cost by invoking theories of "learning by doing" or "import substitution." Economists, who believe in rationality and forward-looking behavior, should predict how their theories can be highjacked in this way, and include the resulting economic damage in their assessment of the usefulness of the theories. At a minimum, they should give clear advance warnings about how their theories should and should not be used.

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